Crossing Paths

WITH WILDLIFE IN WASHINGTON TOWNS AND CITIES **Spring 2000**

Looking back and ahead in the new millenium

This new century marks the 30th anniversary of Earth Day and is a good time to look back at what has happened to fish and wildlife and other natural resources since April 22, 1970. Be sure to check out that retrospective by WDFW's director Jeff Koenings on page 4 of this edition; the picture is gloomy, but helps us focus on what needs fixing.

On the brighter side and looking ahead, the Conservation and Reinvestment Act (CARA) you read about in last fall's edition recently moved out of committee and to the floor of the House of Representatives with two-thirds of their support. This landmark legislation would provide conservation efforts the largest infusion of federal funds in history, $44 billion over the next 15 years ($3 billion annually) using revenue from current (no new) offshore oil leases.

Most would go to state and local wildlife and habitat protection, education and recreation efforts, like fixing what's needed fixing for at least 30 years.

Washington could see as much as $35 million annually for "Watchable Wildlife" development, classroom programs like Project WILD, "Keep common species common" work, and many other endeavors — even support for the Backyard Wildlife Sanctuary program!

For more information and to track CARA, see www.teaming.com.

Meanwhile, check out our website version of this newsletter at www.wa.gov/wdfw and let us know if you want to switch from the paper copy to on-line only.

Urban Canada geese are trying our patience

We brought them here, made them good homes, now how do we get them to leave?

To some, that may sound like adult children whose time has come to leave the nest.

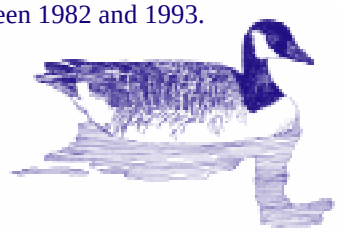
But this is about Canada geese – thousands of them who have taken advantage of the urban habitat both intentionally and accidentally created for them, that are now trying our patience by their very presence.

How is it that a beautiful species, whose distinctive V-shaped strands on the wing across spring and autumn skies makes us pause, whose plaintive, wild honking sends a primeval chill up our spines, has become such a source of aggravation?

Easy. There are simply too many eating and pooping in the wrong places -- city parks, golf courses, residential backyards, and other urban settings. Canada geese have found a good thing here, especially in western Washington's urban areas: abundant food, mild climate, few predators, and no hunting pressure.The succulent lawns, access to open water, and peaceful nesting areas are enough to call it home.

And many Washington urbanites, particularly in the Puget Sound area, have had enough to call it war.

Most Canada goose populations are migratory, wintering in the southern U.S. and migrating north to summer breeding grounds in the Canadian arctic. But increasing urban and suburban development in the U.S. has inadvertently created ideal year-round goose habitat, and populations are up everywhere. Washington surveys showed that goose numbers in the Columbia River drainage doubled, and in some areas tripled, in the decade between 1982 and 1993.



Canada geese were a rare occurrence in Puget Sound 30 years ago, and the western subspecies is actually considered a non-native to the area. Some western Canada geese were introduced to Puget Sound in the '60's when McNary and John Day dams were completed on the Columbia River and an effort was made to

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Crossing Paths is a twice-yearly newsletter for Washington residents enrolled in the Backyard Wildlife Sanctuary Program.

Westside: 16018 Mill Creek Blvd., Mill Creek, WA 98012 / 425-775-1311
Eastside: N. 8702 Division St., Spokane, WA 99218 / 509-456-4082

www.wa.gov/wdfw

Crossing Paths Newsletter

Writer/Editor: *Madonna Luers*
Contributing Urban Wildlife Biologists:
Russell Link, Patricia Thompson (Seattle - Mill Creek)
Howard Ferguson (Spokane), Michelle Tirhi (Tacoma)
WDFW Graphics Office / Print Shop

Washington Department of FISH and WILDLIFE

Who's That?

Backyard birders may wonder "Who's that?" when tiny, quick-moving members of the **Wren** family arrive on their property in the spring. These assertive, noisy birds hardly fit our definition of a reclusive troglodyte, but they actually make up the family **Troglodytidae**. One Native American term for wren translates to "big noise from little size." The Anglo-Saxon word "wren" carries a connotation of lasciviousness, perhaps because of the males' polygamous behavior.

Whatever we call them, wrens are fun to get to know, especially since some species readily use or even prefer human-made nest boxes.

Washington is home to six species of wrens. Three are particular to special habitats not usually found in backyard sanctuaries, as noted in their common names -- Marsh wren, Canyon wren, Rock wren. But the other three are relatively common in the open woods, dense shrubbery, or gardens that many backyards include.

The **Winter wren** *(Troglodytes troglodytes)* is the smallest at about 3-1/2 inches in length. It also has the shortest tail, a mere stub in comparison to other birds but like most wrens it cocks that tail in a perky upright position. Also like most wrens, it has a chunky body, slender and slightly curved bill for insect-eating, and basic brown plumage.

Along Washington's coast, the Winter wren is a year-round resident. But in the rest of the state it moves in for spring and summer breeding and migrates to the southwest for the winter. (Perhaps southern birders created its common name?) The male arrives in April, usually a week or two before females. He busily builds several nests, usually low in dense brush, often streamside. A mating female chooses a nest, and then the male shows the remaining nests to another female for a second mating.

Most common is the **House wren** *(Troglodytes aedon)*, a spring and summer resident of Washington that winters in or near Mexico. Its larger size (4-1/2-inch length) is gained mostly in its longer tail. Otherwise it looks very similar to the winter wren, perhaps with less prominent barring on the belly.

Its common name comes from its nesting affinity for birdhouses, or house porch lights, cans, hats, boots or nearly any cavity-like, man-made item that appears to provide some measure of security. House wrens have even been known to nest in the pockets of pants hanging on a clothesline!

The early-arriving male House wren cleans out a nest site, which may include destroying another bird's nest and nestlings, then builds a foundation with twigs. He repeats this in several sites within his half-acre or so territory, all the while warbling loudly. When a female arrives to inspect the sites, his song changes to a high, squeaky one and he performs wing quivers and flutter flights to entice her. When she chooses a nest, she lines it with soft grass and feathers. The male brings her food while she incubates eggs.

House wrens often have a second brood, sometimes with the same mate but sometimes not. The male repeats his nest cleaning and building and courting rituals, and the female leaves her first brood for the male to feed so that she can start the second.

The **Bewick's wren** *(Thryomanes bewickii)* is more distinctive in appearance, with its long, sideways-flitting tail edged in white spots, its light colored breast, long white eyebrow, and larger size (up to 5 inches). A year-round resident, it is most commonly found in western Washington but has been noted regularly throughout the state.

The Bewick's (pronounced like "Buick's") wren was named by John James Audubon to commemorate his friend Thomas Bewick, an English naturalist and wood engraver. Although all wrens are prolific and loud songsters, the Bewick's wren has one of the most beautiful voices. It begins high and rapid, changing to a lower register, ending in trills.

These wrens also readily uses nestboxes, taking as much as ten days to build very sturdy nests. Like most wren species, egg incubation lasts about two weeks, and nestling care before fledging lasts about another two weeks.

These six weeks or so of high-energy wren courting, nesting, and rearing can be among the most fascinating for backyard birders, especially those who make and place nestboxes suited for them. Follow the directions in the Backyard Wildlife Sanctuary packet's "Nest Boxes For Birds" pamphlet for building the right size house for wrens.

Winter surveys due soon

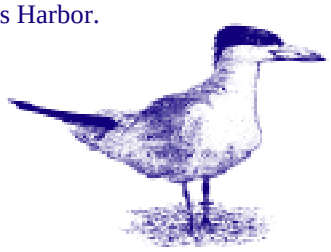
If you're among the more than 1,000 backyard birders who have been helping WDFW count birds this winter, your completed survey form is due April 15, 2000.

If you'd like to be a part of this yearly count across Washington next winter, drop us a postcard at "Winter Bird Surveys" 16018 Mill Creek Blvd., Mill Creek, WA 98012 or e-mail thomppat@dfw.wa.gov.

Tern Update

Remember the Caspian tern colony on the old Asarco plant in Tacoma's Commencement Bay? Asarco had agreed to allow the terns to finish their nesting season in 1999 with the promise that WDFW would help keep terns off the site in 2000. WDFW biologists in the South Puget Sound are currently investigating several potential new homes for the birds, including sites on McNeil Island, Steilacoom, Vashon Island, and Commencement Bay. Ideally, a new location is one that would not put listed salmon species at risk of predation by terns, one that does not create a noise or smell problem for people, and one that is long term.

Management of Caspian terns in Commencement Bay is separate from issues surrounding Caspian terns on the Columbia River. Work has also proceeded on moving Caspian terns off dredge spoil islands in the Columbia River to a more acceptable location in Grays Harbor.



Landscaping book is a hit!

WDFW's new book "Landscaping for Wildlife in the Pacific Northwest" hit the market just before Christmas last year and is already in its second printing!

This new hit, published by the University of Washington Press of Seattle, was written by WDFW's urban wildlife biologist Russell Link, who has extensive experience in the field of landscape architecture. Russell thanks all of the Backyard Wildlife Sanctuary members who lent a helping hand with this project.

The 320-page book has 85 color wildlife illustrations, more than 100 line drawings, and 20 computer-generated drawings of nest box and feeder plans. It includes a wealth of information on the following topics:

* Wildlife habitat,landscaping basics
* Extensive plant lists for specific habitat types and areas in WA
* Birds, mammals, reptiles, amphibians, and insects likely to be attracted to your property
* Specialty gardens for butterflies and hummingbirds
* How to plant and maintain woodlands, grasslands, wetlands, and waterways
* Feeders and nest boxes, including up-to-date information on bat houses
* Ponds and birdbaths
* Wildlife problems and solutions
* Wildlife viewing tips

"Landscaping for Wildlife in the Pacific Northwest" is available in area bookstores and on the Internet for the retail price of $29.95. Copies can be mail-ordered from WDFW's Mill Creek or Spokane offices (see mailing addresses on cover) with a check for $28 (payable to WDFW), which includes tax, shipping, and handling. You can also pick up a copy at those offices for just $25.

"We abuse land because we see it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect."

- Aldo Leopold

New BWS directory available

In response to requests by many of you for information on the whereabouts of nearby fellow Backyard Wildlife Sanctuaries, the first edition of the Backyard Wildlife Sanctuary Directory was produced this year.

This directory includes only those BWS managers who asked to be listed, and is for use only by BWS managers. It can be obtained by sending a request with a stamped, self-addressed envelope to: WDFW- BWS Program, 16018 Mill Creek Blvd., Mill Creek, WA 98012, (or contact Russell Link (425) 775-1311 x 110, or e-mail at linkrel@dfw.wa.gov. We apologize for any mistakes which may have been made in the process of compiling the information. If you have comments, corrections, or updates, please let us know.

If you are interested in being added to the directory, please send us your street address, phone number/email address, and a brief description of your property and how you manage it for wildlife. We expect to update the directory again next year.

New small mammal study piloted in Spokane

Those funny-looking little contraptions in Spokane's parks and other public green spaces are part of a new study of small mammals in the urban environment.

WDFW urban wildlife biologist Howard Ferguson explains that he wants to learn more about the population and distribution of city-dwelling moles, shrews, mice, rats, gophers, squirrels, and other small mammals. He also wants to learn from this pilot just what kinds of traps work best to capture small mammals so they can be

measured and tagged like birds for future data collection comparisons.

An Eastern Washington University graduate student is assisting with the new project this spring. If it is successful, future study may include volunteers.

Earth Day is good time to take stock of growth

With the 30th observance of Earth Day on April 22, 2000, we have more than 5.7 million reasons to focus attention on environmental issues in Washington state.

Those reasons? They're all people.

Washington's human population has grown almost 40 percent, or over 2.2 million people, since Earth Day was first celebrated three decades ago. That makes our state one of the most densely populated in the West.

With this population growth has come tremendous pressures on the state's natural resources, including fish and wildlife and their habitat. Today, at least 30,000 acres, and perhaps as much as 80,000 acres, of fish and wildlife habitat are destroyed or negatively altered annually.

"Since the first Earth Day, Washington state has undergone tremendous population growth," WDFW Director Jeff Koenings says. "This growth has fundamentally altered many of our state's terrestrial and aquatic ecosystems and contributed to the critical decline or elimination of many of our native fish and wildlife species."

For example:

- There are 49 fish and wildlife species in Washington state listed as endangered or threatened by the federal government or the state; 75 others are of concern and could be added to those lists. The primary reason for decline of most species was habitat loss or degradation.

- An estimated 700 state rivers and streams fail to meet federal Clean Water Act standards. About 3,000 miles of streams are blocked to salmon passage by road culverts. Only 22 percent of juvenile wild chinook survive to reach the ocean.

- An estimated 90 percent of the wetlands in urban areas have been lost to development. Of all of the state's wetlands left, only 35 percent presently are considered to have good water quality. About 43 percent of threatened and endangered species rely on wetlands for survival.

- Thirty years ago, there were 23.1 million acres of forestland in Washington; today there are about 20 million . Old-growth forests have declined from near 9 million acres to just 2.6 million acres.

- Since the '70s, native grasslands and shrub-steppe habitat has been reduced to only a few intact areas, causing the deline of 17 wildlife species, including sage and sharp-tailed grouse, golden eagles, burrowing owls, pygmy rabbits, ferruginous hawks, Washington ground squirrels and even the formerly ubiquitous black-tailed and white-tailed jackrabbits.

"If our jackrabbits are in trouble, Koenings says, "we know our ecosystems are in big trouble. We must focus research, protection and restoration efforts in these and other habitats that are part of our natural heritage."

Looking back at losses over the last 30 years and working to offset them is one thing. Looking ahead is quite another, since our state population is estimated to double by the middle of this new century. That would add the equivalent of 29 cities the size of Tacoma or Spokane!

"The really hard work to protect and recover our wildlife and fish in the 21st century will not occur in Washington, D.C. or Olympia," Koenings says. "It will occur in the many cities and counties across the state, carried out by partnerships between government and citizen groups and individuals. Whether it's salmon recovery or Backyard Wildlife Sanctuary management, the best conservation efforts come from the bottom up, not the top down."

Ups and downs of Purple martins and people

One native part-time resident of Washington that has an up and down history of close relationships with humans is the purple martin (*Progne subis*).

This largest member of the swallow family migrates to central Brazil where it winters in flocks of up to 100,000, often using big city night roosting spots to avoid predators. They return to their same cavity-nesting sites on our coast by the first of April each year.

Martins were first lured to man-made nest sites by Native Americans who hung hollowed-out gourds in their villages. They were desirable for driving crows away from crops and vultures from meats and hides, as well as providing melodious song, aerial acrobatics, and insect consumption.

Over thousands of generations, purple martins became adapted to nesting in man-made gourds, likely because they gained some security from predators near humans. Gourds provided more space than natural cavities, which enabled martins to lay more eggs and raise more young. The clustering of gourds also allowed more martins to nest together (as compared to solitary woodpecker holes) which increased breeding attempts and security to the colony.

When European colonists arrived in America, they too hung natural gourds, ceramic gourds, and wooden houses for martins to nest. By the 20th century, the entire eastern race of purple martins nested only in man-made houses. In the Pacific Northwest and Southwest, martins continue to nest in both natural and man-made cavities.

From 1900 to 1950, as the human population increased in Washington, martins became locally common from Bellingham to Vancouver and the Columbia River, including one flock in Seattle that exceeded 12,500 individuals. This population increase was short-lived, however. In the late 1940's the European

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Foil those deer by planting their "least favorites"

Deer may become your least favorite backyard visitor when they munch everything from the arborvitae to your prized roses.

But you can keep deer from becoming a pest in a number of ways, including a shift in your landscaping regime to some of their least favorite plants.

Whether it's blacktail deer in western Washington, or mule deer or whitetail deer in eastern Washington, they are "browsers." That means they eat "browse," or the growing tips of shrubs, trees, and other plants. Evidence of browsing is the ragged tips where the twigs have been broken. (Rodents and rabbits leave a clean cut when they browse.)

In late winter and early spring most deer use grass, clover, and other forbs and legumes in their diet.

In fact, during February and March when snowcover usually fades, temperatures rise, and sunlight hours noticeably increase, deer are out in droves on almost anything edible. That's because they're trying to regain calories lost during winter when it usually costs them more in body energy to look for food than what they gain from it.

Plant use by deer varies by the number of deer in the area, the availability of alternative food sources, winter weather conditions, and plant preferences. From area to area, deer also have different tastes. Young plants may be eaten and older plants of the same species left alone, especially in early spring when deer are trying succulent new growth of plants they otherwise would not eat.

One option for coexisting with deer is to plant or replace damaged plants with more "deer-resistant" (or close to it!) plants. These are species that tend to be (but not always!) a deer's least favorites.

The following list includes "best bets" for keeping deer disinterested. It should be considered a guide rather than the final word. Many local native species are adapted to the rainfall regime here in Washington, and many have other wildlife values (like cover or seeds for birds).

Deciduous Shrubs: barberry, butterfly bush, red-twig dogwood, hazelnut (Filbert), golden currant, red-flowered currant, wild rose, elderberry, snowberry, lilac, spirea, potentilla, cotoneaster.

Evergreen Shrubs: sagebrush, evergreen barberry, rabbitbrush, silk-tassel bush, salal Oregon-grape, wax-myrtle Oregon-boxwood, mugho pine, rhododendron, evergreen huckleberry.

Trees (these must be protected from deer when young): fir, maple, birch, false cypress, fig, Oregon ash, spruce, pine, Douglas-fir, chokecherry, oak, sumac, willow.

Perennials: black-eyed Susan, blanket flower, bleeding-heart, bluebells, butterfly weed, coral bells, coreopsis, creeping phlox, daisy, daylilies, delphinium, flax, foxgloves, gay feather, hellebore, iris, sage, seathrift, snow-in-summer, wallflower, yarrow.

Annuals: ageratum, baby's breath, bachelor buttons, calendula, California poppy, cosmos, Chinese forget-me-not, dusty miller, marigolds, salvia, snapdragon, snow-on-the-mountain, sunflower, sweet alyssum, four o'clock, zinnia.

Herbs and Vegetables: chives, lavender, marjoram, mints, oregano, sage, thyme, cucumbers, potatoes, tomatoes.

If you'd rather keep the plants you already have, (or if you can attest to "your" deer's use of the above plants!), there are other ways to discourage deer.

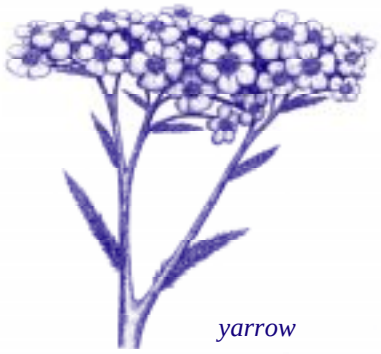
Fencing is still the only consistently effective tool for reducing deer damage. Deer can be kept out of areas with six-foot high net-type wire fencing that is properly installed. Chicken wire will work as long as posts are not more than 12 feet apart and the wire is stretched tight and anchored to the ground so deer don't crawl under. Believe it! Deer will crawl. Board fences and solid hedges need only be 5½ feet high; deer won't jump over objects when they can't see what's on the other side.

Individual trees and shrubs can be protected with **exclusion devices** such as cylinders of welded-wire mesh placed around them. This will also prevent bucks from rubbing their antlers on trees– breaking branches or girdling trunks. New seedlings and very young trees can be protected with plastic mesh tubes or netting. Fine mesh chicken wire laid out on the ground around plants can also dissuade deer because they don't like to get their feet in the wire.

Many garden shops carry commercial deer **repellents,** most made from a base of blood or bone meal. Home remedies include hanging bars of deodorant soap or mesh bags of human hair, or spraying plants with a mixture of raw eggs and water. All have varying degrees of success and usually have to be reapplied after rain.

Various **scare tactics** can move deer out of an area, although sometimes only temporarily, depending on how established their eating habits have become. Try connecting bright lights, radios, or water sprinklers to motion detectors.

Remember that the most deer-proof property may be one that combines sensible plantings with fencing and repellents.



yarrow

Urban Canada geese are trying our patience

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rescue nests and eggs from rising water levels. Others were released during the '70's through relocations from damage areas, and others expanded naturally from the eastside. Geese in the Puget Sound area increased by 434%, from 3,110 in 1988 to 13,512 in 1997!

Like other adaptable wildlife species, geese try to make a living wherever their needs can be met most easily. In urban areas, they congregate wherever grass lawns (food) are near waterways (security). Large flocks denude lawns and their droppings don't just ruin aesthetics -- in heavy concentration they can over-fertilize lawns, contribute to excessive algae growth in lakes that can result in fish kills and closure of public swimming areas, and potentially contaminate municipal water supplies.

Geese are very aggressive when nesting and may attack people who come near their nests. Geese have also been involved in a growing number of airport problems, from take-off and landing delays while they are harassed out of the area, to actual aircraft collisions.

In 1987, the growing population of resident Canada geese and the problems they were causing in and around Seattle prompted the formation of the Seattle Waterfowl Committee. Federal and state (WDFW) wildlife biologists participated from the beginning as advisory members.

As a migratory species, Canada geese fall under the U.S Fish & Wildlife Service (USFWS) jurisdiction and the first line of response to damage complaints comes from the U.S. Department of Agriculture (USDA). One of the first attempts at control was trapping and release of resident geese from the Puget Sound area by the USDA's Wildlife Services (WS). Between 1989 and 1994, WS captured

and transported 7,342 geese to sites in eastern Washington and northern Idaho, (ironically including the Columbia and Snake River areas from which some had come just a couple of decades earlier!) These relocations proved largely ineffective, however, because most moved into other urban areas or even back to Puget Sound! (It seems that you can take the goose out of the city, but you can't take the city out of the goose!) Wildlife managers also began to fear that relocated geese would spread diseases into migrant populations, so relocating ended.

Between 1992 and 1998, WS addled (destroyed by oiling, shaking, or puncturing) 6,336 Canada goose eggs from urban area nests. This also proved insufficient in the absence of goose removal, and

damage complaints continued to increase. In 1997 and 1998, WS resorted to the lethal removal of 450 geese from three sites in Puget Sound and an additional 128 from various other locations. The euthanized geese were donated to local food banks.

WDFW often manages goose populations by regulated hunting, but of course that's not possible in most urban and suburban communities.

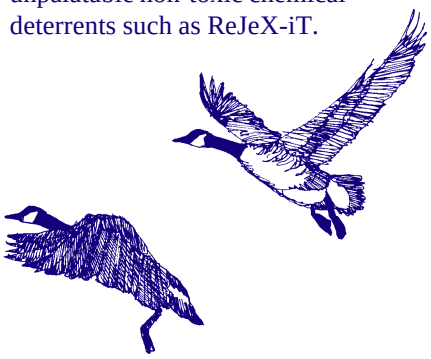
When this newsletter was prepared (February-March), USFWS held public meetings (including in the Puget Sound area) to solicit comments on an Environmental Impact Statement (EIS) to develop a nationwide management strategy for resident Canada goose populations in human-populated areas. This management strategy proposes both non-lethal and lethal control. EIS copies can be obtained from, and written comments can be sent through **March 30, 2000** to, Office of Migratory Bird Mgmt., US Fish &Wildlife Service, Dept.of the Interior, MS 634 ARLSQ, 1849 C St., NW Washington, D.C. 20240.

E-mail: *canada_goose_eis@fws.gov*.

Meanwhile, WDFW biologists advocate habitat alterations and public education as the most desirable methods of goose control.

Whether you live in the Puget Sound area or other places in Washington where geese can be a problem, here's what you can do to help:

- **Don't feed geese** (or other water fowl). The birds will not starve, and all the bread, popcorn and chips are not good for them anyway.
- **Stop providing good goose habitat.** Reduce lawn near the water's edge. Let the grass along lake shores and rivers grow to at least 18 inches, or plant less desirable ground cover shrubs, such as salal, along the shoreline.
- **Create a barrier.** Build a fence or plant a thick hedge along the shore or around your yard. Geese generally walk to the water and such barriers can dissuade them from using the area. Maintaining cattails and bullrushes along the shore may prevent geese from coming ashore.
- **Harass or scare geese away.** Hang mylar balloons or tape over head at about 40 -50 feet and change them every few days. Use loud noises; remember firecrackers and cannons generally require permits. Use unpalatable non-toxic chemical deterrents such as ReJeX-iT.



Willow flycatchers keep coming back

When Willow flycatchers find a place to summer and raise a family, they keep coming back.

That's just one thing that WDFW urban biologist Howard Ferguson and his volunteers are finding as they prepare to start the fifth year of a bird study in the Spokane area. The Monitoring Avian Productivity and Survivorship (MAPS) study catches birds during the breeding season in fine "mist" nets strung between poles and placed in the same spots year after year. The caught birds are leg-banded, measured, and weighed, then released. Changes and patterns in the number of young produced and the survivorship of adults and young are tracked.

MAPS is a continent-wide program with nearly 500 standardized bird-netting and banding stations throughout the U.S.and Canada. Since 1996, WDFW has been running two of these stations near Spokane, one in a rich riparian community in the Little Spokane River State Park Natural Area, and another one on the southwest slope of Mt. Spokane State Park.

So far, the Spokane MAPS volunteers have recorded that four Willow flycatchers have returned to the Little Spokane River site each of the four years of the study. One was captured three times, two were captured four times, and one bird was captured seven times — and all in the very same net!

One Yellow warbler was also captured twice in two different nets over the four year period, and one Gray Catbird was captured three times in the same net.

Here's a summary of all the results to date:

TOTALS FOR 1996-1999
MAPS BANDING SITES, SPOKANE, WA.

Site by Years	Species Captured	Birds Captured	Birds Recaptured	Adults Captured	Juveniles Captured
Little Spokane					
'96	33	404	42	174	187
'97	31	292	73	191	76
'98	28	329	76	207	96
'99	30	316	65	195	100
Totals	**44**	**1341**	**256**	**767**	**459**
Mt. Spokane					
'96	16	73	8	56	13
'97	20	111	24	90	12
'98	19	113	37	91	21
'99	17	97	33	45	9
Totals	**28**	**394**	**102**	**282**	**55**

Purple martins

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starling and House sparrow were introduced to Washington and their aggressive competition for nest sites drove purple martins into decline.

Today, volunteers across Western Washington are working to bring back purple martins. More than 35 colonies have been established by local Audubon chapters and bird enthusiasts. Establishment of a colony includes mounting purple martin nest boxes or gourds and annually monitoring and maintaining them. Key to success is using boxes or gourds with proper specifications, providing several boxes at the same location (clustering), and keeping them free of nest competitors and predators.

The Purple Martin Conservation Association was created to help people interested in establishing a purple martin colony. This non-profit group can be reached by phone (814-734-4420), email (*pmca@edinboro.edu*), or website (*http://www.purplemartin.org*).

WDFW is working cooperatively with British Columbia, Oregon, and California to manage purple martins along the west coast. Nest boxes are annually checked, recording the number of eggs and chicks. Hundreds of purple martin chicks are also leg banded each year at the largest colonies with each state/province using a different leg band color. The leg bands help biologists understand site loyalty, migration, colonization, and chick survival. Blood samples were taken in 1999 for a genetics study that will attempt to learn whether purple martins using man-made nest boxes along the west coast evolved from the same ancestors. If so, the size of the purple martin population could be limited by available nest boxes in a 'bottle neck' fashion.

Crossing Paths
WITH WILDLIFE IN WASHINGTON TOWNS AND CITIES

Washington Department of Fish and Wildlife
Backyard Wildlife Sanctuary Program

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Mill Creek, Wa. 98012 / 425-775-1311
Eastside: N. 8702 Division St.,
Spokane, Wa. 99218 / 509-456-4082

It's never been easier to get a personalized plate and help wildlife

Applying for a personalized license plate has never been easier! Just log-on to the Department of Licensing (DOL) web site at **www.wa.gov/dol,** and click the interactive **Inquiry Plate** to see if your personalized word, phrase or statement (up to seven letters) is available. When you find a selection available, you can download an order form to fill out and send through the mail.

You can also pick up an application at your nearby license plate vendor or WDFW offices in Mill Creek, Montesano, Vancouver, Yakima, Wenatchee, Ephrata, or Spokane. Or to receive an application in the mail, call the Washington Department of Licensing at (360) 902-3770 (option 5).

Forty dollars from the initial purchase of personalized plates and the entire $30 yearly renewal fee supports the protection of our non- game fish and wildlife. Since this program's inception in 1974, thousands of dollars have funded research on species of concern and their habitats, such as bald eagles, marine mammals, western grey squirrels, marbled murrelets, shrub-steppe, and oak woodlands; purchase of habitats for threatened and endangered species, such as ponds inhabited by the endangered western pond turtle and peregrine falcon nesting areas; information development for you and others in the Backyard Wildlife Sanctuary program; and many other efforts.

You can learn more about how personalized license plate funds benefit fish and wildlife at the WDFW website **www.wa.gov/wdfw** and you can easily link from there to the DOL website and order your personalized plate today!